

## CLAIMS

What is claimed is:

- 1 1. A cable TV electronic filter assembly, comprising:  
2 a generally cylindrical conductive housing having first and  
3 second cable connectors in opposed relation to each  
4 other along a longitudinal axis, said housing  
5 containing an interior volume;  
6 first and second circuit board surfaces, in superposed  
7 relation to each other, engaging said filter housing  
8 within the interior volume, said first and said second  
9 surfaces facing away from each other in opposite  
10 directions and being substantially parallel to the  
11 longitudinal axis;  
12 first and second cable TV filter circuits mounted on said  
13 first and said second circuit board surfaces,  
14 respectively, said first and said second circuits being  
15 electrically coupled to each other;  
16 a ground plane disposed between said first and said second  
17 circuit board surfaces in substantially parallel  
18 relation to the longitudinal axis, said ground plane  
19 contacting said filter housing within the interior  
20 volume such that a common electrical ground is  
21 established between said housing and said ground plane;  
22 and  
23 first and second electrical terminals coupled to said first  
24 and said second filter circuits, respectively, said  
25 first terminal extending into and being operatively  
26 supported inside the first cable connector, and said  
27 second terminal extending into and being operatively  
28 supported inside the second cable connector.

- 1 2. The cable TV electronic filter assembly of claim 1,  
2 wherein said first circuit board surface is a rear surface of a  
3 first circuit board and said second circuit board surface is a  
4 rear surface of a second circuit board, said first and said  
5 second circuit boards engaging said filter housing within the  
6 interior volume.

1       3. The cable TV electronic filter assembly of claim 2,  
2 wherein said ground plane is located on a front surface of said  
3 first circuit board.

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1       4. The cable TV electronic filter assembly of claim 2,  
2 wherein said ground plane is located on a front surface of said  
3 second circuit board.

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1       5. The cable TV electronic filter assembly of claim 3,  
2 further comprising a second ground plane located on a front  
3 surface of said second circuit board.

1  
1       6. The cable TV electronic filter assembly of claim 1,  
2 wherein said filter housing contains a plurality of grooves  
3 within the interior volume, said first and said second circuit  
4 board surfaces engaging said plurality of grooves.

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1       7. The cable TV electronic filter assembly of claim 6,  
2 wherein said filter housing includes a male terminal cap, said  
3 plurality of grooves being located in the male terminal cap.